

Group A *Streptococcus* Disease

What is group A *Streptococcus* (GAS)?

Group A *Streptococcus* (GAS) are bacteria. These bacteria are often found in the throat and on the skin, and they don't always cause disease. When people do get infected by GAS, the disease can range from mild to severe. The most common disease caused by GAS is strep throat. GAS can also cause illness when it enters the body through a wound or other opening in the skin. Serious disease can happen when the bacteria invade parts of the body such as the bloodstream, fat, or muscle.

How are group A *Streptococcus* spread?

These bacteria are spread by direct contact with body fluids, such as secretions from the nose and throat or a wound of an infected person. Casual contact (as in work and school) and household items (like plates, cups, toys, etc.) rarely play any role in spreading the bacteria.

The risk of spread of GAS is greatest when an individual is ill - people who carry the bacteria but have no symptoms are much less contagious. An infected person is no longer contagious after they have been treated with an appropriate antibiotic for at least 24 hours; however, it is important to take all of the antibiotics as prescribed.

Why does invasive group A *Streptococcus* disease occur?

Invasive group A *Streptococcus* disease occurs when the bacteria get past the body's defenses. This may happen when a person has sores or other breaks in the skin. Some health conditions that affect a person's immunity also make invasive disease more likely. In addition, certain strains of GAS are more likely to cause severe disease.

Who is most at risk of invasive group A *Streptococcus* disease?

Very few people develop invasive GAS disease after exposure to the bacteria. Although healthy people can get invasive GAS disease, people with chronic illnesses like cancer, diabetes, and heart and lung problems, those on kidney dialysis, and those who use medications such as steroids, are at higher risk. IV drug use and alcoholism also increase the risk for these infections. In addition, breaks in the skin, like cuts, surgical wounds, or chickenpox may increase the risk of a severe disease.

Can invasive group A *Streptococcus* disease be treated?

Group A *Streptococcus* infections can be treated with antibiotics. In addition, treatment in an intensive care unit and sometimes surgery are necessary for invasive disease. Early treatment may reduce the risk of death but even appropriate therapy does not prevent death in every case.

Should contacts of individuals with invasive group A *Streptococcus* disease be tested and treated?

There is no evidence that casual contacts, such as co-workers or school and daycare classmates, are at risk of developing invasive GAS disease following contact with a person who has an invasive GAS disease. However, household contacts have rarely developed severe disease. Therefore, local health departments evaluate households when an invasive GAS infection is reported; antibiotics may be recommended for individuals in households where someone has a condition that puts them at risk of a severe GAS infection.

What can be done to help prevent invasive group A *Streptococcus* disease?

The spread of group A *Streptococcus* may be reduced by good handwashing, especially after coughing and sneezing; before and after caring for an ill person; and before preparing foods and before eating. Anyone with a bad sore throat should see a healthcare professional. Persons with GAS infections should stay home from work, school, or daycare until they have taken antibiotics for at least 24 hours. All wounds should be kept clean, and watched for signs of infection (e.g., redness, swelling, pain, pus). If a wound looks infected, especially in a person who also has a fever, consult a healthcare professional immediately.